

BELER



AUTOMATIC
WATER
HEATERS

PITTSBURGH,
PA.



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BELER

A U T O M A T I C
W A T E R
H E A T E R S

F O R A R T I F I C I A L A N D
N A T U R A L G A S

C A T A L O G U E " A "



Directions for operating

The "BELER"

Just turn the faucet

BELER WATER HEATER COMPANY

A Guarantee that makes you safe



The Beler Guarantee

We guarantee all heaters to be delivered in perfect mechanical condition, and free from defects in workmanship or material for one year.

We further guarantee that with artificial gas testing 650 heat units, the Beler Heater will use not more than one cubic foot of gas to each gallon of water raised 69 degrees in temperature, or with natural gas, one cubic foot will raise the temperature of each gallon of water 100 degrees.

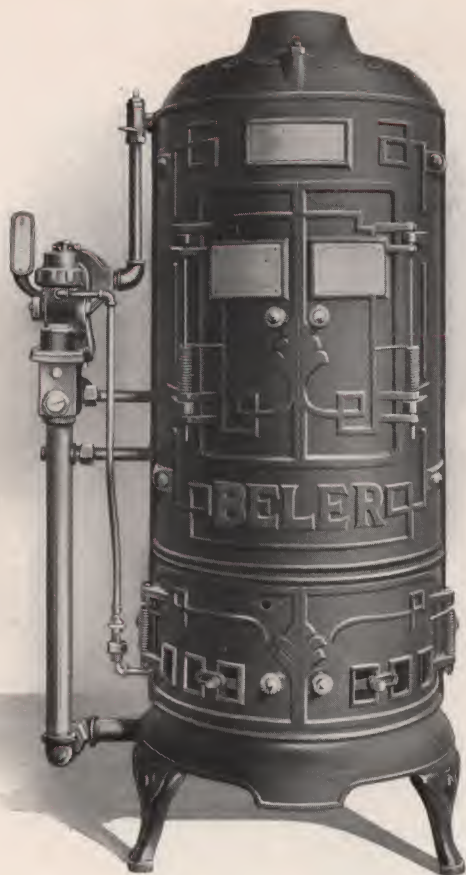
If a heater of sufficient capacity according to our recommendations, and connected up in accordance with our printed directions should not, after a fair 30 days' trial, do exactly what we claim herein, it may be returned at once.

We do not guarantee, or agree to keep heaters in repair for one year when they are too small for the requirements, or where conditions are exceptional, and where the heater is subjected to more than the ordinary usage.

We will not assume responsibility for installation charges, nor will we be responsible for any other guarantee except as here stated.

BELER WATER HEATER COMPANY
Pittsburgh, Pa.

BELER AUTOMATIC GAS WATER HEATER



With Doors Closed

The Beler
Instantaneous Automatic Gas Water Heater

Protected by United States Patents

Aug. 5, 1902; Aug. 12, 1902; Dec. 16, 1902; February 11, 1908;
Sept. 15, 1908; April 6, 1909; Dec. 27, 1910;
July 16, 1912; Jan. 7, 1913; Feb. 18, 1913

The Heater Without "Troubles"

The Beler Instantaneous Automatic Gas Water Heater

The Beler Instantaneous Automatic Water Heater is one of the greatest conveniences that can be installed in the home. It consists of a long copper heating coil and a set of powerful gas burners encased in a handsome cast-iron jacket. It is attached to the water and gas pipes in the basement; the water passes through the heater and is heated as it passes on its way to the various faucets as they are opened. No gas is used except when hot water is drawn and no more water is heated than is required.

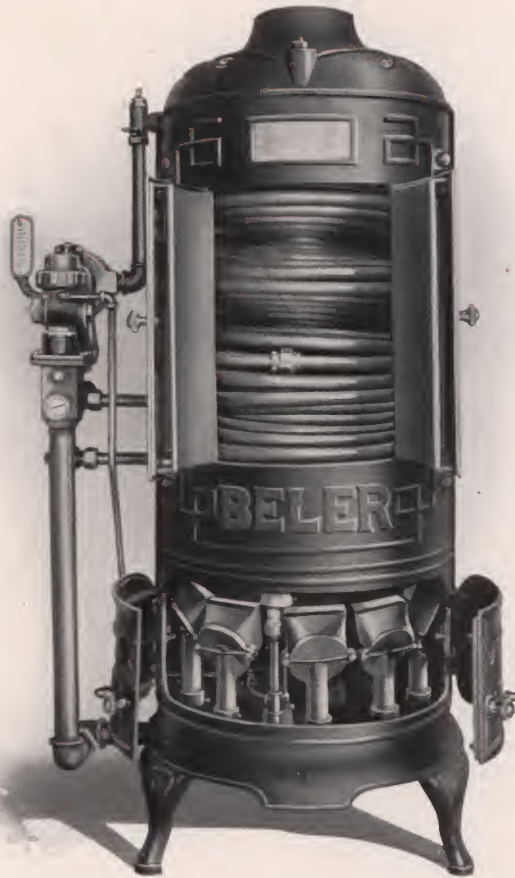
The Beler furnishes clean, scalding hot water in the laundry, in the kitchen, in the bathrooms, all over the house, by simply turning the faucet. It runs hot as long as you wish, and when you close the faucet the gas goes out and there is no further expense until hot water is drawn again.

The Beler Automatic Water Heater is an absolute necessity in the modern home. After using it a little while you will wonder how you ever got along without it. It is not expensive to operate; not nearly so expensive as the small tank heaters and not even so expensive as coal, because it only heats the water you use and there is no heat wasted by radiation as in the kitchen tank.

It takes one cubic foot of gas to heat each gallon of water; therefore, with artificial gas at \$1.00 per thousand cubic feet, the "Belér" will furnish one hundred gallons of hot water for ten cents worth of gas. With natural gas at 30 cents it will furnish one hundred gallons of hot water for three cents and this is about as much as the average family will use in a day.

If you can possibly afford an automatic water heater, don't put it off any longer, but buy a "Belér." There is nothing that will pay you such big dividends in convenience and home comfort as the purchase of a Beler Automatic Water Heater.

BELER AUTOMATIC GAS WATER HEATER



The Beler—Model B

With upper and lower doors open to show copper heating coils and patented hydro-carbon burners. Note how accessible every part of the heater is.

A Marvel of Modern Mechanics

BELER WATER HEATER COMPANY

The "Belér" can be operated with artificial, natural or gasoline gas (but not with acetylene gas) and it can be attached to the piping already in your cellar without any change and at a very small expense.

With a Belér Heater you can furnish your home with an inexhaustible supply of clean, scalding hot water at every faucet and at any minute in the day, and at much less than coal would cost to do the same work. This is made possible by the fact that the "Belér" absorbs and utilizes over 85% of the heat in the gas. Actual tests show that no other water heater yet devised has ever approached the efficiency of the "Belér."

With a Belér Automatic Water Heater in your home you can have hot water instantly at any hour of the night in case of sudden illness by simply turning the faucet in your bathroom.

You can take a hot bath and there will still be an unlimited supply for the rest of the family.

No matter how early you get up in the morning, there is hot water to shave with. Just turn the faucet—it is waiting for you.

The laundress can sleep an hour longer on washday because it is not necessary to put the boiler on the stove. Simply turn the faucet and the Belér furnishes all the hot water you want, when you want it.

In summer it isn't necessary to heat up the kitchen like a furnace just to get a little hot water—simply turn the faucet; hot water is ready for you.

Think what a great convenience such a machine as the Belér is, not only to yourself and every member of the family, but to the servants as well. It is such conveniences as this and the vacuum cleaner that are solving the servant problem. It makes housework easy and makes it easy to get and keep good "help."

The "Belér" is a simple piece of mechanism that does its work day after day, year after year, without any attention or repairs whatever. It is constructed of copper, brass and iron, and will furnish you with hot water for the rest of your life.

BELER AUTOMATIC GAS WATER HEATER



Hot Water always ready for the Bath or Toilet



It waits for you in the Kitchen and Laundry



Instantaneous Hot Water all over the House

Reasons Why You Should Buy the "Belser"

**Patented and Exclusive Features found only in the
Belser Water Heater**

The Belser Patented Water Valve is constructed so that it cannot bind or stick. It is the simplest and most satisfactory valve ever used in a water heater, and it has eliminated a great source of trouble and expense connected with the older types of heaters. This valve will operate perfectly on a much lower water pressure than any other.

The Belser Hydro-Carbon Burners are non-corrosive, will not burn out, and never need to be renewed. It is these powerful burners that enable us to secure an efficiency of 85 per cent. in the heater.

The Belser Thermostat is simplicity itself. It is connected to both ends of the heating coil, assuring instant and complete control of the temperature.

The only heater having adjustable air shutters in the bottom of the jacket for regulating the mixture of air and gas to secure perfect combustion.

Has a detachable circulating coil. Eighteen-gauge seamless copper tubing is used throughout, and tested to 1000 lbs. pressure.

The Belser is equipped with brass couplings, ready for the hot and cold water and gas connections.

The Belser Pilot Light will not go out, and being non-corrosive, it will not clog up.

The Belser is not an experiment, but the result of experiment by experts who have been working for over twenty years to make it the perfect machine it is to-day.

These experts have eliminated a mass of springs, stuffing boxes and complicated mechanism, and there are over one hundred less parts than in the older types of heaters.

The keynote of the Belser is "Simplicity," which is the elimination of the non-essential. It means the survival—not only of the fittest, but of the best.

And, remember, the money you don't have to spend on repairs is clear profit.

Beler Hydro-Carbon Burners (Patented)



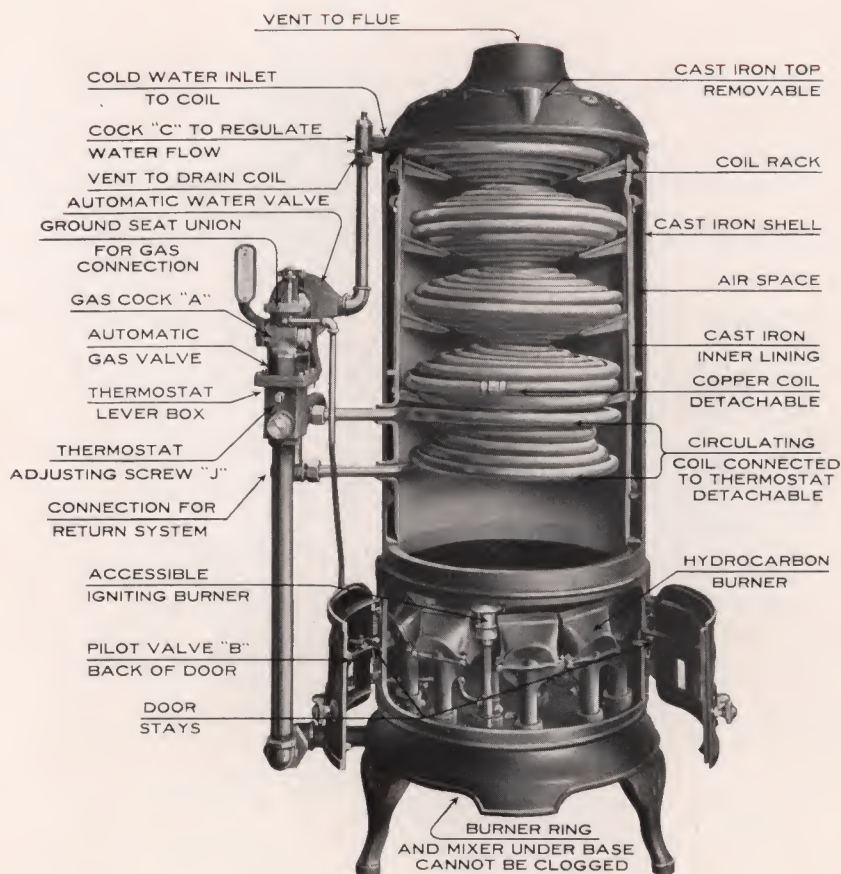
The Beler patented Burners are the most powerful and efficient on the market; it is through these that we are enabled to get an efficiency of over 85% in our instantaneous water heaters. They are constructed of heavy cast-iron, and instead of the troublesome copper gauzes used by all other makers, these are equipped with slotted soapstone caps which are practically indestructible, are not affected by the most intense heat, and which will not clog up, since they are non-corrosive. Each burner has a brass bushing in its base to prevent sticking, making it easy to remove, if this should become necessary.

A glance at the illustration will show that the burner ring, or gas chamber, is placed underneath the base of the heater where it cannot be affected by condensation. This makes it impossible for the air mixers to become clogged up.

The legs of the heater base are separable and it is not necessary to take the heater apart in the event of one being broken in shipment—just slip it in and tighten a screw.

The Beler Burners eliminate all burner troubles. They do not have to be replaced from time to time, but will last as long as the heater itself.

BELER WATER HEATER COMPANY



Fitter's Specifications for all size Heaters

Size Heater	Size Water Inlet	Outlet to Fixtures	Size Gas Line from Meter	Size Vent Pipe	Size of Meter Required	Adjust Flow of Water at Valve "C" to
2	$\frac{3}{4}$ inch	$\frac{1}{2}$ inch	$\frac{3}{4}$ inch	5 inch	20 light	2 Gals. per Min.
3	$\frac{3}{4}$ "	$\frac{1}{2}$ "	1 "	6 "	30 "	3 " " "
4	$\frac{3}{4}$ "	$\frac{1}{2}$ "	$1\frac{1}{4}$ "	6 "	45 "	4 " " "
6	$\frac{3}{4}$ "	$\frac{3}{4}$ "	$1\frac{1}{2}$ "	7 "	60 "	6 " " "
8	$\frac{3}{4}$ "	$\frac{3}{4}$ "	2 "	7 "	80 "	8 " " "

Conditions Under Which the Beler will Operate Successfully

In order for the Beler Water Heater to give satisfactory service, sufficient water pressure is necessary to operate the mechanism. A sufficient supply of gas to heat the water is also necessary.

Artificial, natural or gasoline gas can be used; the only change necessary being in the size of the orifice in the spuds on which the burners rest. In using artificial gas, No. 36 drill orifices are used; for natural gas, No. 52 drill orifices are used, and for gasoline gas No. 32, or No. 34, drill is used, according to the gas pressure.

The Beler heater cannot be operated with acetylene gas, gasoline or kerosene oil.

The following table gives the correct size of water and gas pipes required for the various size heaters and these should never be reduced:

Size Heater	Gas Line from Meter	Water Line to Heater	Size of Meter
2	$\frac{3}{4}$ inch	$\frac{1}{2}$ inch	20 light
3	1 "	$\frac{1}{2}$ "	30 "
4	$1\frac{1}{4}$ "	$\frac{1}{2}$ "	45 "
6	$1\frac{1}{2}$ "	1 "	60 "
8	2 "	1 "	80 "

Low Water Pressure

Where the heater is to be operated by gravity pressure from a tank in the attic, we furnish a special "low pressure" heater, equipped with a larger water valve and with a shorter coil of larger diameter, thus cutting down the friction as the water flows through the heating coils.

Whenever the water pressure is below 14 lbs. *at the highest faucet* the low pressure heater should be used.

Note—Low pressure heaters are not made in smaller sizes than the No. 4.

An ample supply of gas is just as necessary as water pressure and it is important that the size of gas pipe and meter as shown in above table are not reduced.

The Beler Patented Mechanism

This mechanism has many less parts than any of the older types, and it has wonderfully simplified the adjustment, regulation and operation of the automatic water heater, besides reducing troubles and upkeep charges to the vanishing point.

Note the simplicity of the water valve; the large port holes that cannot clog up with sediment, and the single diameter plunger which cannot stick. Only one gas valve is required in this construction, as compared with two used in the old types. This makes for simplicity and reduces the possibility of leaks and troubles to the minimum. The gas valve has extra large openings, so that a full flow of gas can be obtained where the pressure happens to be low. Note the opening ready for the return line, if return circulation is desired; also note the ease with which the temperature of the water may be raised or lowered by the simple turn of screw "J."

The heating coil and water valve can be completely drained if heater is not in use during freezing weather. The metallic thermostat is connected to both ends of the heating coil and is adjusted at the factory by a "slack take-up" screw so that it and the compound levers become practically one, with no slack whatever, giving instant and complete control of the temperature. Every important feature of the Beler mechanism is covered by broad patents and infringers will be prosecuted.

The Beler Thermostat

The Beler Thermostat consists of a porcelain rod enclosed in a copper tube. The law of contraction and expansion is utilized to make it operate on compound levers, resulting in the opening or closing of the gas valve and turning on or closing off the gas automatically as the copper tube is lengthened or shortened by the temperature of the water surrounding it.

The Beler Thermostat is absolutely positive and certain in its action, and regulates the temperature of the water to any degree desired; it is very simple in construction and there is nothing about it to wear out or get out of order. With the Beler Thermostat in command of the heater it is absolutely impossible for the water to become heated beyond the predetermined temperature at which it is set.

What it Costs to Operate the "Belser"

More Economical than Coal

People who have never used a Beler heater have an idea that it is quite expensive to operate and that it uses a great deal of gas. This is not the case, however. While we cannot give the actual cost in each case, since this depends upon the amount of hot water used, we can and do guarantee that one cubic foot of gas will heat one gallon of water, and if a hundred gallons are used, it will cost ten cents with gas at one dollar per thousand cubic feet. If no hot water is used, no gas will be consumed except by the pilot light which only uses one cent's worth a day.

It is its high efficiency that makes the "Belser" heater cheaper than coal. Besides, you never have to wait for the hot water; it is always waiting for you.

The following record of an actual installation shows the cost for gas required to operate a No. 4 Beler heater in a residence having a family of five adults and two servants. There were two bath tubs, three laundry tubs, one kitchen sink and three lavatories. The gas tested 650 heat units per cubic foot and cost one dollar per thousand, and the average cost per month for the Beler heater was only \$2.90, including the pilot light. If connected on the reheating system, as shown on page 17, the cost would have been considerably less.

Month	Total Gas Bill	Lighting and Range	Belser Pilot only	Belser Heater including Pilot
January	\$7.90	\$4.90	\$0.30	\$3.00
February	7.10	4.00	.30	3.10
March	5.80	2.60	.30	3.20
April	5.50	1.90	.30	3.60
May	5.60	2.70	.40	2.90
June	5.50	2.90	.30	2.60
July	7.70	4.50	.30	3.20
August	6.30	4.90	.20	1.40
September	6.90	3.50	.30	3.40
October	5.60	2.90	.30	2.70
November	5.40	2.40	.30	3.00
December	4.70	1.90	.30	2.80

At an average price for gas, an average family is here supplied with unlimited hot water at an average cost of \$2.90 per month.



The Beler Pilot Light

The top of the pilot light is constructed of soapstone, in one piece. The shank extends down considerably below the flame, and the cast-iron collar into which it screws cannot become overheated and will therefore not expand. The soapstone is not affected by the most intense continuous heat and it will last a lifetime. Being non-corrosive, the carbon from the flame will not adhere to it, nor will the orifices become clogged up. A Beler draft hood is furnished with each heater and when this is installed in the vent pipe above the heater it is impossible for the pilot light to become extinguished.

Architect's Model Specification For Installing a Beler Water Heater

"Furnish and place in space shown on plans, one No. . . . Beler Automatic Water Heater, connecting to it the hot and cold water and gas pipes in strict accordance with the printed instructions which accompany the heater. Furnish and place in position, the proper size flue connections from heater to chimney and insert a Beler draft hood in same as shown in the Beler instructions.

Put Your Problems Up To Us

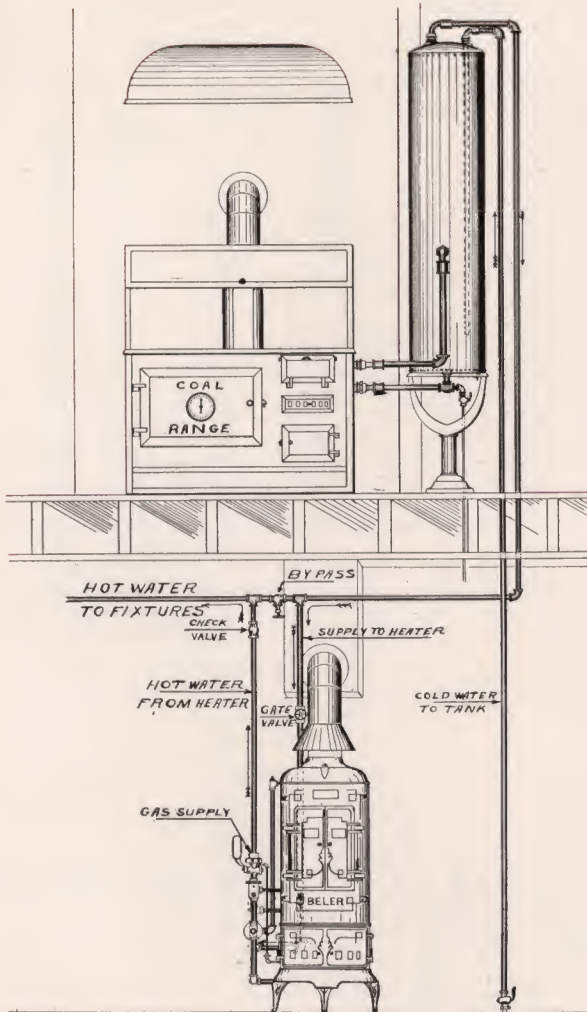
We are not merely manufacturers, but practical water heater experts.

In the development of our business we have encountered practically every condition and problem that can possibly arise.

The specialized knowledge which we have accumulated during many years of effort, is placed at your disposal.

Write us. We shall be glad to advise you on any problem in our line, and you may rest assured that our advice will be practical and trustworthy.

BELER WATER HEATER COMPANY



Illustrating the Supplementary or Automatic Re-Heating System
in connection with a coal range and kitchen
boiler. (See next page)

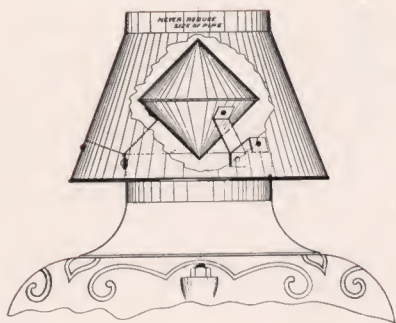
The Automatic Re-Heating System

The illustration on the preceding page shows how the Beler Heater may be used in automatic connection with a boiler heated by the range water-back, or by a coil in the house heater.

When connected up as shown, the water flows from the boiler to the heater, and through the heater to the various fixtures in the house. Upon opening any hot water faucet the heater automatically goes into action, and if the water coming from the boiler is sufficiently hot, the gas is shut off automatically by the heat of the water; but if the temperature of the flowing water is below 140° , the heater automatically turns on just enough gas to bring it up to 140° . When no hot water faucet is opened the gas is entirely shut off, and will not light up until the water drawn from the boiler needs more heat added.

Where there is a kitchen boiler and coal range already installed, this method of connecting up the Beler heater combines the desirable features of both coal and gas systems at the minimum operating cost.

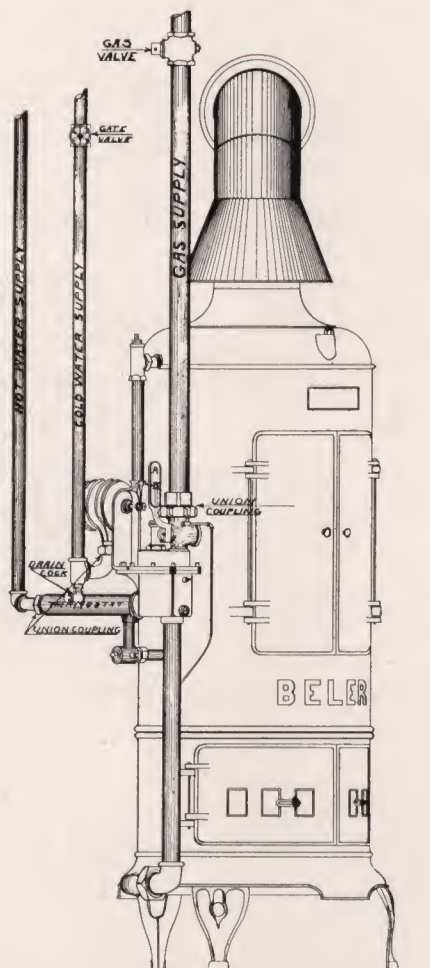
Remember, the "Beler" does not circulate or heat the water in the tank. It simply intercepts the flowing water on its way to the faucet, and only adds (when needed) the necessary degrees of heat to guarantee an ever-ready supply of hot water.



The Beler Draft Hood

One of these hoods is sent with each heater and it should be installed in the vent pipe above the heater as shown. This hood prevents down drafts and makes it impossible for the pilot light to blow out.

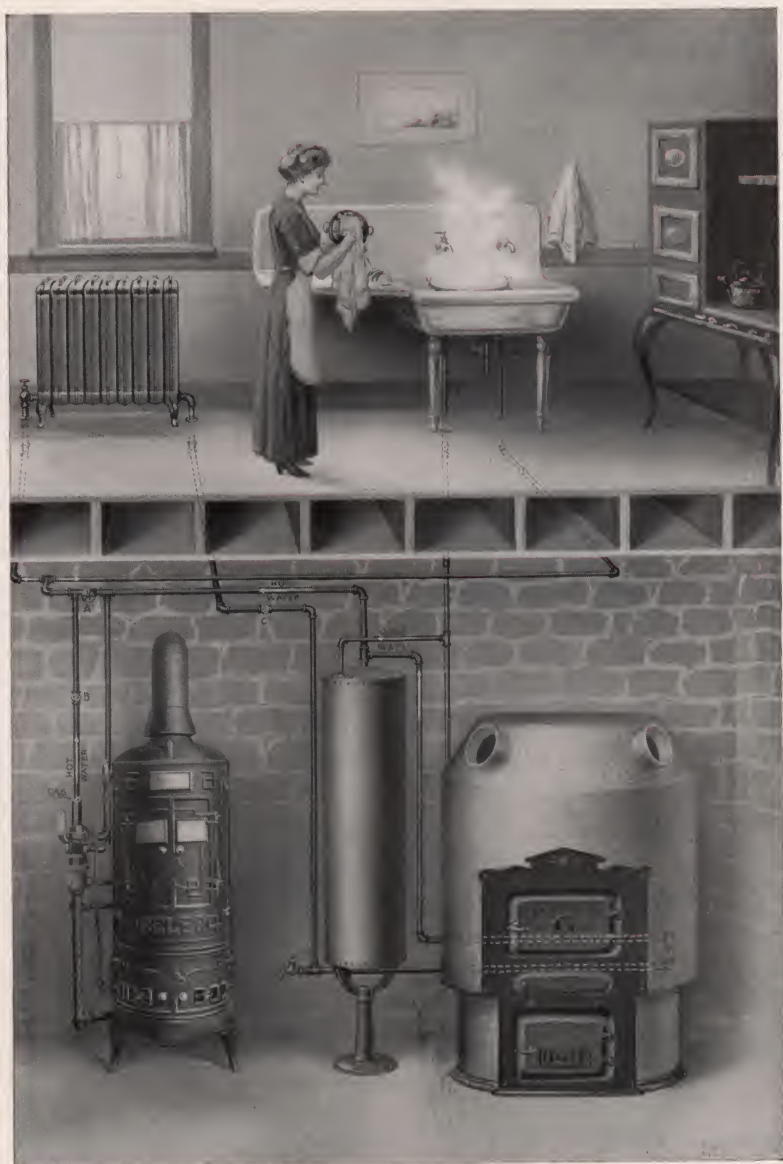
BELER WATER HEATER COMPANY



**The Beler Automatic Instantaneous Heater
Connected for Direct Supply**

Showing how easy it is to connect the Beler to the water and gas pipes
already in the house

BELER AUTOMATIC GAS WATER HEATER



Showing the All-Gas Kitchen. (See next page)

The All-Gas Kitchen

Made Possible by the "Belser"

Every woman will readily realize the wonderful convenience and desirability of being able to cook with gas in winter as well as in summer.

Heretofore this has not been possible because there was no way to furnish an adequate supply of hot water for the household needs.

But now, however, this ideal condition can be attained by installing a Beler Automatic Water Heater in the basement in connection with the furnace coil and a radiator in the kitchen, as shown in the illustration on the opposite page.

If the furnace coil should fall short of supplying enough hot water when there is a heavy demand, the supply can be increased by simply turning a valve and putting the "Belser" into operation. In summer when the furnace is not in use, the "Belser" alone will furnish an inexhaustable supply of clean hot water all over the house.

In warm weather, when the furnace is not in use, close valve "A" and open valve "B." This puts the "Belser" in operation. In winter, close valve "B" and open valve "A" and the hot water will be supplied from the boiler.

This sytem can be installed in old houses as well as new, and any size "Belser" can be used. It does away with the dust and dirt incident to the use of coal and makes it easier to keep good servants. In fact, this system is sure to come into general use as soon as its advantages become better known.

The ability of an Automatic Water Heater to render the fullest measure of satisfactory service must include an efficient mechanism that will operate certainly, efficiently and surely through a lifetime of use.

The 1914 Beler Water Heater has been designed to meet, and does meet, these requirements.

Get a "Belser" and keep the Cook

BELER AUTOMATIC GAS WATER HEATER

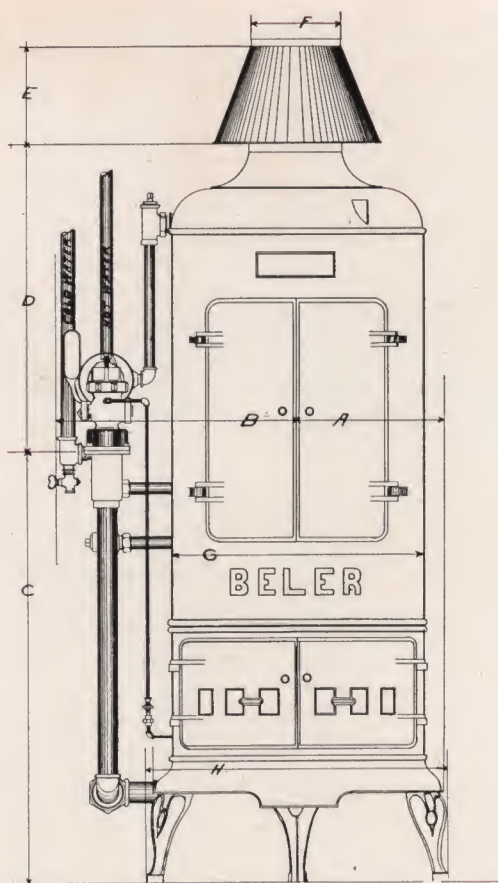
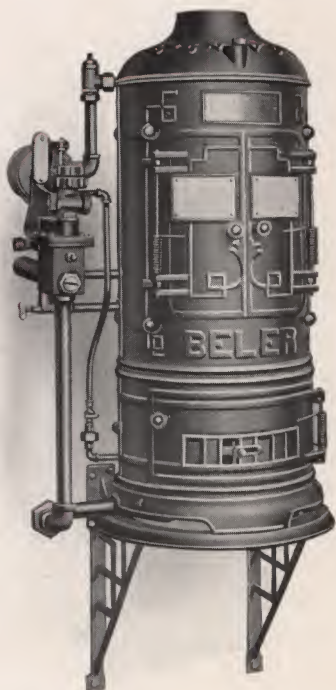


Table of Heater Dimensions and Weights

Size	A	B	C	D	E	F	G	Net Weight	Weight Crated
No. 2	7"	14 $\frac{7}{8}$ "	21 $\frac{1}{2}$ "	16"	5"	5"	12 $\frac{3}{4}$ "	190 lbs.	225 lbs.
No. 3	9"	15"	28"	20 $\frac{1}{2}$ "	6"	6"	14 $\frac{1}{2}$ "	280 "	320 "
No. 4	10"	16"	28 $\frac{1}{4}$ "	20 $\frac{1}{2}$ "	6"	6"	16 $\frac{1}{2}$ "	390 "	430 "
No. 6	11 $\frac{1}{2}$ "	17"	28 $\frac{3}{4}$ "	22 $\frac{1}{2}$ "	6 $\frac{3}{4}$ "	7"	17 $\frac{7}{8}$ "	450 "	490 "
No. 8	12"	18"	28 $\frac{3}{4}$ "	25"	6 $\frac{3}{4}$ "	7"	19 $\frac{3}{8}$ "	495 "	540 "

The Beler Apartment Heater



The Beler Apartment Water Heater is identically the same in every detail as our larger size Automatic Heaters except that the legs are replaced with a wall bracket so that it can be placed on the wall in a corner where it will be out of the way. It takes up practically no space and being located so close to where the hot water is wanted, it furnishes it instantly without any waste of gas whatever.

The Beler Apartment Heater has a capacity of $2\frac{1}{2}$ gallons of scalding hot water per minute—ample for the average apartment or bungalow having one bathroom and a kitchen sink.

The low price at which this high grade heater is sold makes it an attractive proposition to builders of apartment houses and small cottages because it not only solves the hot water problem, at a low cost, but is also a great inducement to purchasers and tenants.

Remember, this heater is equipped with the complete Beler mechanism same as the larger size Beler heaters.

Price, Delivered

In United States, East of the Rocky Mountains, \$65.00

Dimensions and Weight

Capacity per Min.	Height	Diam. over all	Water Inlet	Gas Supply	Flue Pipe	Net Weight
$2\frac{1}{2}$ Gals.	34"	22"	$1\frac{1}{2}$ "	$\frac{3}{4}$ "	4"	190 lbs.

Prices of Beler Instantaneous Automatic Gas Water Heaters

In United States, East of the Rocky Mountains

No. 2, capacity, 2 gallons hot water per minute . . . \$ 65.00

Suitable for kitchen sink or one bath-room. Should never be used in connection with more than two fixtures.

No. 3, capacity, 3 gallons hot water per minute . . . \$100.00

Suitable for small dwellings, usually having only one bath-room, lavatory, and kitchen connections for hot water.

No. 4, capacity, 4 gallons hot water per minute . . . \$115.00

This is the standard size, and is the heater we recommend for the home having bath-room, kitchen sink and laundry tubs. This size will supply the average household with all the hot water needed.

No. 6, capacity, 6 gallons hot water per minute . . . \$150.00

This size is adapted for dwellings having two or three bath-rooms, butler's pantry, laundry and one or two extra lavatories.

No. 8, capacity, 8 gallons hot water per minute . . . \$185.00

Suitable for large dwellings having three to six bath-rooms, butler's pantry, laundry and several extra lavatories. It is also well adapted for small hotels, restaurants, small apartment houses, shower baths, etc.

Note—Above prices are all F. O. B. Destination, but do not include plumbing connections or fitting up.

DIRECTORY

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BELER

